



Sea-Bird Scientific
13431 NE 20th Street
Bellevue, WA 98005
USA

+1 425-643-9866
seabird@seabird.com
www.seabird.com

SENSOR SERIAL NUMBER: 3777
CALIBRATION DATE: 09-Oct-19

SBE 37 PRESSURE CALIBRATION DATA
10153 psia S/N 6172

COEFFICIENTS:

PA0 =	2.559550e+000	PTCA0 =	-1.255001e+001
PA1 =	4.852919e-001	PTCA1 =	3.650114e-002
PA2 =	-4.888030e-007	PTCA2 =	9.141266e-003
		PTCB0 =	2.494788e+001
		PTCB1 =	-6.250000e-004
		PTCB2 =	0.000000e+000

PRESSURE SPAN CALIBRATION

THERMAL CORRECTION

PRESSURE (PSIA)	INSTRUMENT OUTPUT (counts)	TEMPERATURE (°C)	COMPUTED PRESSURE (PSIA)	RESIDUAL (%FSR)	TEMP (°C)	INSTRUMENT OUTPUT (counts)
14.66	18.2	22.1	14.93	0.00	32.50	25.28
2000.89	4123.5	22.1	1999.95	-0.01	29.00	23.29
3987.87	8268.0	22.2	3987.19	-0.01	24.00	20.67
5974.97	12449.2	22.2	5975.00	0.00	18.50	18.26
7962.13	16666.4	22.2	7962.60	0.00	15.00	17.04
9949.71	20918.2	22.3	9948.89	-0.01	4.50	14.90
7962.10	16666.7	22.3	7962.74	0.01	1.00	14.50
5974.84	12450.5	22.3	5975.61	0.01		
3987.77	8269.2	22.3	3987.75	-0.00	TEMPERATURE (°C)	SPAN
2000.75	4124.5	22.4	2000.39	-0.00	-5.00	24.95
14.68	19.2	22.5	15.33	0.01	35.00	24.93

$$x = \text{instrument output} - \text{PTCA0} - \text{PTCA1} * t - \text{PTCA2} * t^2$$

$$n = x * \text{PTCB0} / (\text{PTCB0} + \text{PTCB1} * t + \text{PTCB2} * t^2)$$

$$\text{pressure (PSIA)} = \text{PA0} + \text{PA1} * n + \text{PA2} * n^2$$

$$\text{Residual (\%FSR)} = (\text{computed pressure} - \text{true pressure}) * 100 / \text{Full Scale Range}$$

